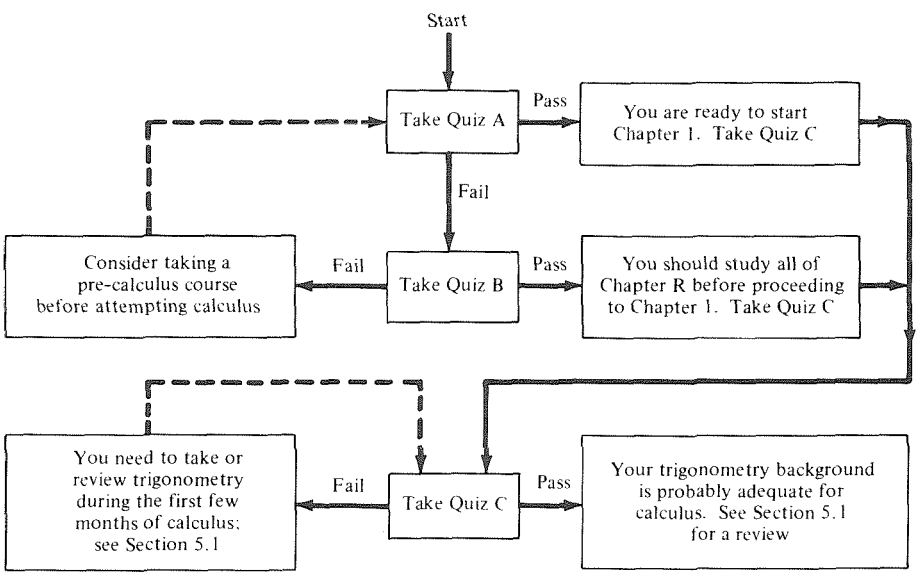
Orientation Quizzes

Guidelines


Start
Take Quiz A
Pass
You are ready to start Chapter 1. Take Quiz C
Fail
Consider taking a pre-calculus course before attempting calculus
Fail
Take Quiz B
Pass
You should study all of Chapter R before proceeding to Chapter 1. Take Quiz C
You need to take or review trigonometry during the first few months of calculus; see Section 5.1
Fail
Take Quiz C
Pass
Your trigonometry background is probably adequate for calculus. See Section 5.1 for a review

Quiz A

(Passing score is 8/10. Answers are on p. A.1.)

1. What is the slope of the line $3y + 4x = 2$?
2. For which values of x is $3x + 2 > 0$?
3. For which values of x is $3x^2 - 2x - 1 > 0$?
4. Solve for x: $2x^2 + 8x - 11 = 0$.
5. Sketch the graph of $f(x) = x^2 - x - 2$.
6. Let $g(x) = (3x^2 + 2x - 8)/(2x^2 - x)$. Compute $g(2)$ and state the domain of g.
7. For what values of x is $3x + 2 > 2x - 8$?
8. Where does the graph of $f(x) = 3x - 2$ intersect the graph of $g(x) = x^2$?
9. Sketch the curve $x^2 + y^2 - 2x - 4y + 1 = 0$.
10. Find the distance between the point $(1, 1)$ and the intersection point of the lines $y = -2x + 1$ and $y = 4x - 5$.

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Quiz B

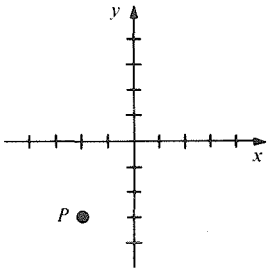
(Passing score is 8/10. Answers are on p. A.1.)

1. $\frac{3}{2} + \frac{5}{4} =$ _____ .
2. Factor: $x^2 + 3x =$ _____ .
3. $(-6)(-3) + 8(-1) =$ _____ .
4. If a bag of sand weighs 80 kilograms, 5% of the bag weighs _____ .
5. $[(3x - 1)/2x] - \frac{1}{2} =$ _____ . (Bring to a common denominator.)
6. $x^3 \cdot x^4 =$ _____ .
7. Arrange these numbers in ascending order (smallest to largest): 8, -6, $\frac{1}{2}$, 0, -4.
8. Solve for x: $6x + 2 = -x - 1$.
9. If $x = 3$ and $y = 9$, then $\sqrt{y}/3x =$ _____ .
10. $(x^2 - 16)/(x - 4) =$ _____ . (Simplify.)

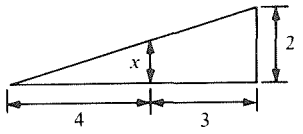
Quiz C

(Passing score is 7/10. Answers are on p. A.1.)

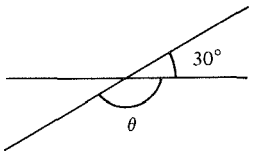
1. Find the coordinates of the point P:



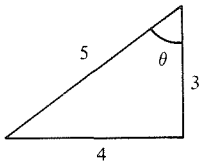
2. Find x:



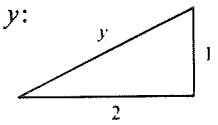
3. Find θ:



4. Find $\sin\theta$:



5. Find y:



6. What is the circumference of a circle whose radius is 4 centimeters?
7. A rectangle has area 10 square meters and one side of length 5 meters. What is its perimeter?
8. The volume of a cylindrical can with radius 3 centimeters and height 2 centimeters is _____ .
9. $\cos 60° =$ _____ .
10. $2\sin^2 x + 2\cos^2 x =$ _____ .

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